

Course Outline of Record

1. Course Code: PHIL-010
2.
  - a. Long Course Title: General Logic
  - b. Short Course Title: GENERAL LOGIC
3.
  - a. Catalog Course Description:  
 An introduction to the basics of deductive and inductive logics. Emphasis is placed on the syntax and semantics of elementary deductive logic. Inductive reasoning, the identification of informal fallacies, and the rudiments of the scientific method are also studied.
  - b. Class Schedule Course Description:  
 General Logic is an introduction to the exact science of reasoning.
  - c. Semester Cycle (if applicable): N/A
  - d. Name of Approved Program(s):
    - PHILOSOPHY
4. Total Units: 3.00      Total Semester Hrs: 54.00  
 Lecture Units: 3      Semester Lecture Hrs: 54.00  
 Lab Units: 0      Semester Lab Hrs: 0  
 Class Size Maximum: 45      Allow Audit: Yes  
 Repeatability No Repeats Allowed  
 Justification 0
5. Prerequisite or Corequisite Courses or Advisories:  
*Course with requisite(s) and/or advisory is required to complete Content Review Matrix (CCForm I-A)*  
 Advisory: ENG 001A and  
 Advisory: MATH 060
6. Textbooks, Required Reading or Software: (List in APA or MLA format.)
  - a. Hurley, Patrick J. (2011). A Concise Introduction to Logic (11th/e). Wadsworth Publishing. ISBN: 978-084003416  
 College Level: Yes  
 Flesch-Kincaid reading level: 13
7. Entrance Skills: *Before entering the course students must be able:*
  - a. Exhibit skill in constructing organized essays with a focused thesis.
    - ENG 001A - Write thesis statements, topic sentences, and ideas in an organized way in multi-page essays.
    - ENG 001A - Write essays with varied strategies, including persuasive essays, with a arguable theses and evidence from a variety types of sources.
    - ENG 001A - Use a variety of rhetorical strategies to write essays.
    - ENG 001A - Incorporate complex sentence-structure and variety of word choice.
    - ENG 001A - Recognize and integrate creative elements of style (metaphor, analogy, voice, tone).
  - b. Employ the process of writing to generate and develop ideas, and to clarify and organize thought.
    - ENG 001A - Write essays with varied strategies, including persuasive essays, with a arguable theses and evidence from a variety types of sources.
  - c. Respond to complex exam questions in written form.
    - ENG 001A - Develop ideas coherently in writing through the drafting process.
    - ENG 001A - Participate in the process of developing texts in collaborative and individual settings.
    - ENG 001A - Write essays with varied strategies, including persuasive essays, with a arguable theses and evidence from a variety types of sources.
    - ENG 001A - Use a variety of rhetorical strategies to write essays.

# PHIL 010-General Logic

- ENG 001A - Incorporate complex sentence-structure and variety of word choice.

## d. Demonstrate basic arithmetic skills.

- MATH 060 - Compute using the four basic operations of addition, subtraction, multiplication, and division on the rational numbers in both fraction and decimal form.

## 8. Course Content and Scope:

### Lecture:

1. The logical functions of natural language
2. The nature of deductive, inductive and abductive inference
3. The structure of an argument
4. The nature of validity, soundness and inductive strength
5. Basic predicate logic
6. Venn diagrams
7. Truth-functional logic
8. Formal and informal fallacies
9. The nature and practical applications of probability
10. Derivations in sentential logic.

Lab: (if the "Lab Hours" is greater than zero this is required)

## 9. Course Student Learning Outcomes:

1.

Identify the common fallacies in informal reasoning.

2.

Distinguish valid arguments from invalid arguments.

3.

Distinguish inductive arguments from deductive arguments.

4.

Distinguish weak inductive arguments from strong arguments.

5.

Construct semantic tableaux for evaluating arguments in propositional logic.

6.

Recognize and employ valid rules of inference in sentential logic.

7.

Perform derivations via natural deduction.

## 10. Course Objectives: *Upon completion of this course, students will be able to:*

a. Identify and describe the logical functions of natural language.

b. Distinguish the various types of definitions from one another in terms of their function, describe the function in each case, and apply this knowledge to specific cases.

c. Identify and describe the difference between deductive and inductive logic and illustrate this difference by means of specific examples.

d. Distinguish arguments from non-arguments.

e. Identify and describe the general structure of an argument as such and give specific examples of how this structure may appear in actual arguments.

f. Distinguish the form of an argument from its content.

# PHIL 010-General Logic

- g. Articulate clearly the distinction between validity and soundness as it applies to actual arguments.
- h. Use Venn Diagrams to depict meanings and determine validity of categorical syllogisms.
- i. Symbolize plain language categorical propositions as well as translate into ordinary English symbolized arguments.
- j. Distinguish between sentential and predicate logic.
- k. Use the techniques of truth-functional logic to determine the validity of appropriate arguments.
- l. Create and apply truth-table analysis to determine validity.
- m. Perform derivations in sentential logic via natural deduction.
- n. Describe the relationship of probability theory and hypothesis testing in applying the scientific method.
- o. Identify the principal formal and informal fallacies.
- p. Identify the principal steps which constitute the scientific method.

## 11. Methods of Instruction: (*Integration: Elements should validate parallel course outline elements*)

- a. Discussion
- b. Experiential
- c. Journal
- d. Lecture
- e. Self-exploration

Other Methods:

1. Video 2. Guest speakers

## 12. Assignments: (*List samples of specific activities/assignments students are expected to complete both in and outside of class.*)

In Class Hours: 54.00

Outside Class Hours: 108.00

### a. In-class Assignments

- a. Attendance of lectures by instructor and occasional guest speakers, including the taking of detailed notes thereon.
- b. Viewing of films and slide programs, including the taking of notes thereon.
- c. Listening to sound recordings and taking notes thereon.
- d. Special reports by students, in panel or singly.
- e. Participation in class research projects involving the collection, written or oral reports thereon.
- f. Examinations of various types, such as essay and multiple choice.

### b. Out-of-class Assignments

- a. Readings in the textbook and in recommended supplementary literature.
- b. Composition of brief analytical essays.

## 13. Methods of Evaluating Student Progress: *The student will demonstrate proficiency by:*

- College level or pre-collegiate essays
- Written homework
- Critiques
- Guided/unguided journals
- Term or research papers
- Field/physical activity observations
- True/false/multiple choice examinations
- Mid-term and final evaluations
- Student participation/contribution

## 14. Methods of Evaluating: Additional Assesment Information:

## 15. Need/Purpose/Rationale -- *All courses must meet one or more CCC missions.*

CSU GE Area A: Communication in the English Language and Critical Thinking

A3 - Critical Thinking

# PHIL 010-General Logic

PO-GE C2 - Social and Behavioral Sciences

Develop individual responsibility, personal integrity, and respect for diverse people and culture.

IO - Critical Thinking and Communication

Apply principles of logic to problem solve and reason with a fair and open mind.

16. Comparable Transfer Course

University System	Campus	Course Number	Course Title	Catalog Year
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17. Special Materials and/or Equipment Required of Students:

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18. Materials Fees:  Required Material?

Material or Item	Cost Per Unit	Total Cost
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19. Provide Reasons for the Substantial Modifications or New Course:

C-ID alignment

20. a. Cross-Listed Course (*Enter Course Code*): *N/A*  
b. Replacement Course (*Enter original Course Code*): *N/A*

21. Grading Method (*choose one*): Letter Grade Only

22. MIS Course Data Elements

- a. Course Control Number [CB00]: CCC000326054  
b. T.O.P. Code [CB03]: 150900.00 - Philosophy  
c. Credit Status [CB04]: D - Credit - Degree Applicable  
d. Course Transfer Status [CB05]: A = Transfer to UC, CSU  
e. Basic Skills Status [CB08]: 2N = Not basic skills course  
f. Vocational Status [CB09]: Not Occupational  
g. Course Classification [CB11]: Y - Credit Course  
h. Special Class Status [CB13]: N - Not Special  
i. Course CAN Code [CB14]: *N/A*  
j. Course Prior to College Level [CB21]: Y = Not Applicable  
k. Course Noncredit Category [CB22]: Y - Not Applicable  
l. Funding Agency Category [CB23]: Y = Not Applicable  
m. Program Status [CB24]: 1 = Program Applicable

Name of Approved Program (*if program-applicable*): PHILOSOPHY

*Attach listings of Degree and/or Certificate Programs showing this course as a required or a restricted elective.)*

23. Enrollment - Estimate Enrollment

First Year: 0

Third Year: 0

24. Resources - Faculty - Discipline and Other Qualifications:

- a. Sufficient Faculty Resources: Yes  
b. If No, list number of FTE needed to offer this course: *N/A*

25. Additional Equipment and/or Supplies Needed and Source of Funding.

N/A

26. Additional Construction or Modification of Existing Classroom Space Needed. (*Explain:*)

N/A

27. FOR NEW OR SUBSTANTIALLY MODIFIED COURSES

## PHIL 010-General Logic

Library and/or Learning Resources Present in the Collection are Sufficient to Meet the Need of the Students Enrolled in the Course: Yes

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28. Originator Michael Smith      Origination Date 05/07/14